

## Claims

1. Media gateway of a packet-based communication network with
  - a means for data channel control which controls the data channel5 of a communication connection,  
characterized by
  - a means for terminating which terminates the signaling messages
  - a means for connection control which itself performs a part of10 the connection control for a communication connection and  
authorizes a central network controller to carry out the other  
part.
2. Media gateway according to Claim 1, characterized in that the
15 said means for connection control performs all connection control  
functions which do not necessarily need to be carried out centrally  
within the network.3. Media gateway according to Claim 1, characterized in that the
20 said means for connection control performs all connection control  
functions which do not necessarily need to be carried out centrally  
within the network and which are time-critical.4. Media gateway according to one of the Claims 1 to 4,
25 characterized in that it contains a means for management which  
stores and manages the subscriber data.5. Media gateway according to one of the Claims 1 to 4,
30 characterized in that it records the charge data for a communication  
connection.6. Media gateway according to one of the Claims 1 to 5,
35 characterized in that it uses the access control protocol for  
communicating with a said central network controller.

7. Media gateway according to one of the Claims 1 to 5,  
characterized in that it uses the SIP protocol for communicating  
with a said central network controller.

5 8. Media gateway according to one of the Claims 1 to 7,  
characterized in that it sends connection control messages intended  
for another gateway to the other gateway via a said central network  
controller.

10 9. Controller in a packet-based communication network with a means  
for connection control which carries out connection control  
functions centrally in the network on behalf of communication  
connections, characterized in that the controller receives tasks for  
performing the said connection control functions from media gateways  
15 and either carries out the tasks itself or controls further  
execution of the tasks instead of the media gateways.

10. Method for handling communication connections in a packet-based  
network, according to which

20 - incoming signaling messages from a subscriber circuit and/or a  
connection circuit are received and evaluated by a media gateway,  
- as a result the media gateway itself performs a part of the  
connection control and authorizes a central network controller to  
carry out the other part.

25

11. Method for handling communication connections in a packet-based  
network, according to which

- incoming signaling messages from a subscriber circuit and/or a  
connection circuit not using SS7 signaling are received and  
30 evaluated by a media gateway,  
- in the case of incoming signaling messages from a connection  
circuit with SS7 signaling, the user part is received and  
evaluated by a media gateway after the lower protocol layers have  
been processed by a central network controller which includes a  
35 centralized signaling gateway function,

- as a result the media gateway itself performs a part of the connection control and authorizes a central network controller to carry out the other part.